

4.2 LAND USE/RECREATION

4.2.1 Impact Methodology

Impacts on land use were assessed based on whether project activities were consistent with state and local plans and on whether land uses were compatible with the project area and uses in the surrounding area. Examples of projects conflicting with land uses include converting agricultural land to training land, converting maneuver lands to a live-fire facility at KTA, and constructing FTI in a Conservation District. Localized and temporary impacts on land use during construction are also evaluated, as well as training changes to land that is currently used for training. Impacts on recreational resources were assessed by determining the types of recreational uses in and around the project areas then evaluating these uses to determine their sensitivity to the short- and long-term project effects. Also considered was the consistency of project activities with the objectives and policies of state and local recreation plans.

4.2.2 Factors Considered for Impact Analysis

The evaluation of potential impacts on land use was based on the project's potential to conflict with existing or planned land uses in and around the project areas. Factors considered in determining impacts on land use included the degree of conflict with:

- Existing or planned land uses on or around the site;
- The objectives, policies and guidance of the Farmland Protection Policy Act of 1981 (FPPA). The FPPA is intended to minimize the impact of Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses; or
- The objectives, policies, or guidance of state and local land use plans.

Factors considered in determining impacts on recreation resources included:

- Disruption of recreational use of the beach, ocean, or land-based resources, such as parks or recreational paths, or interference with the public's right of access to the sea during project construction;
- Prevention of long-term recreational use, prevention of use during peak season, or interference with the public's right of access to the sea;
- The degree of conflict with Hawai'i Coastal Zone Management Program policies;
- The degree of conflict with the objectives, policies, or guidance of state and local plans; or
- The degree of conflict with the Public Access Shoreline Hawai'i vs. County of Hawai'i Planning Commission (PASH) decision, which assures that Native Hawaiians can exercise traditional and customary practices on undeveloped and underdeveloped land.

Short- or long-term changes in ambient conditions, such as noise, views, dust and odor, may indirectly affect the land use and quality of recreation in the project area. Impacts were

identified from noise, air quality, wildfires, and health and safety. These land use compatibility impacts would be associated with 1) noise (a significant and unmitigable impact associated with SBMR and PTA), 2) biological resources (less than significant impact associated with training within and near Honouliuli Preserve), 3) dust (a significant and unmitigable impact associated with all areas), 4) restricted access to land during fires, and 5) restricted access to training lands when SDZs are active. The issues are evaluated in detail, with the impacts and associated mitigations, and are presented in the respective sections of this document.

The Army will coordinate with the State of Hawai'i to meet coastal zone management (CZM) consistency requirements and will submit a CZM consistency determination to the State Office of Planning.

The Army is coordinated the conversion of agricultural lands at SRAA and PTA with the Natural Resource Conservation Service (NRCS) in light of the objectives and guidelines of the Farmland Protection Policy Act.

In addition to the factors above, the following public scoping comments were also considered or evaluated: accessing recreational resources and continued ranching; identifying landowners of the affected parcels; considering the applicable Sustainable Communities Plans, the Special Management Area, and TNC's stewardship of Honouliuli Preserve; and completing a Coastal Zone Management determination.

4.2.3 Summary of Impacts

Table 4-1 lists the types of land use impacts associated with the Proposed Action, RLA, and No Action at the relevant installations. General descriptions of the impacts are also provided.

Proposed Action (Preferred Alternative)

Significant Impacts

Impact 1: Impacts on natural resources management and recreational land use. Significant impacts on natural resources management and recreational land use are associated with the SRAA land acquisitions, and with the introduction of a live-fire facility at KTA.

Training and operation of the proposed QTR2 on the SRAA could affect land use within the Honouliuli Preserve. Approximately 100 acres (41 hectares) within the SRAA are part of the TNC-managed lands, which are available for natural resources management and hiking. During operation of QTR2, natural resources management and recreational activities would not be permitted within certain portions of the SRAA. This would result in a significant impact on natural resources management and recreation within areas encompassed by the QTR2 SDZ.

Table 4-1
Summary of Potential Land Use Impacts

Impact Issues	SBMR			DMR			KTA			PTA			Project-wide Impact		
	PA	RLA	NA	PA	RLA	NA	PA	RLA	NA	PA	RLA	NA	PA	RLA	NA
Conversion of agricultural land to training land	⊙	⊙	○	⊙	⊙	○	N/A	N/A	N/A	⊙	⊙	○	⊙	⊙	○
Impacts on natural resources management and recreational land use	⊗	○	○	○	○	○	⊗	⊗	○	○+	○+	○	⊗+	⊗+	○
Construction of FTI in a Conservation District	⊙	⊙	○	⊙	⊙	○	N/A	N/A	N/A	⊙	⊙	○	⊙	⊙	○
Impacts on land use during construction activities	⊙	⊙	○	⊙	⊙	○	⊙	⊙	○	⊙	⊙	○	⊙	⊙	○
Changes to training on lands now used for Legacy Force training	⊙	⊙	○	⊙	⊙	○	⊙	⊙	○	⊙	⊙	○	⊙	⊙	○

This table summarizes project-wide impacts. For installation-specific impacts see Chapters 5 – 8.

In cases when there would be both beneficial and adverse impacts, both are shown on this table. Mitigation measures would only apply to adverse impacts.

LEGEND:

⊗ = Significant	N/A = Not applicable
⊙ = Significant but mitigable to less than significant	PA = Proposed Action
⊙ = Less than significant	RLA = Reduced Land Acquisition
○ = No impact	NA = No Action
+ = Beneficial impact	

Unauthorized recreational access at KTA may be adversely affected by additional fencing and signs restricting access, which are necessary due to the proposed live-fire use of the area. Construction and operation of the CACTF would convert general maneuver lands to a live-fire facility, using SRTA only. SRTA has a maximum range of approximately 2,300 feet (700 meters) and an effective range of approximately 246 feet (75 meters). When the range is in use, any traffic (on foot or in unprotected vehicles) within the SDZ would be prohibited. Presently, traffic – such as unauthorized public access - is not strictly controlled at KTA. A significant impact would be associated with the introduction of live-fire training in an area used for low-intensity, generally dismounted, training because of additional restrictions on unauthorized recreational access.

Regulatory and Administrative Mitigation 1. USARHAW would implement range safety restrictions to foot and vehicular traffic within the QTR2 and CACTF SDZs, up to and including installing signs and fencing or closing off these areas, during periods of live-fire range operations. Although land use would be restricted an estimated 180 to 242 days per year and 8 to 12 hours per day, USARHAW would not restrict TNC's access to manage the area or to lead monthly interpretive hikes when the range is not in use. This regulatory requirement would not reduce the impact to less than significant.

Additional Mitigation 1. Potential mitigation measures for this impact associated with QTR2 include:

- Continuing TNC access to the portion of the Honouliuli Preserve within SRAA, using a real estate license permit from DPW Real Property Planning Branch.
- Establishing a citizens' advisory board for O'ahu and Hawai'i USARHAW training lands, made up of local volunteers to assist USARHAW in identifying impacts and mitigations from USARHAW-determined projects and priorities.

No additional mitigations have been identified for unauthorized recreational access at KTA.

Less than Significant Impacts

Conversion of agricultural land to training land. Agricultural land would be changed to training land at the SRAA and the WPAA, and on the easements for Helemanō Trail, Dillingham Trail, and PTA Trail. The proposed training land use conflicts with the existing and planned agricultural land use for approximately 535 acres (219 hectares) at SRAA and approximately 23,000 acres (9,308 hectares) of grazing land at WPAA. Easements for trails would be on existing agricultural roads or undeveloped areas.

The proposed training land use of agricultural land at SRAA is not consistent with the Hawai'i State Plan (HDBEDT 1991), the Central O'ahu Sustainable Communities Plan (City and County of Honolulu 2002a), and the City and County of Honolulu Land Use Ordinance zoning (City and County of Honolulu 2001). Under the Proposed Action, approximately 535 acres (219 hectares) of actively cultivated pineapple land within the 1,400-acre (567-hectare) SRAA would not be available for cultivation. The proposed motor pool and QTR2 would convert approximately 220 acres (89 hectares) of agricultural land to permanent structures, which would be an irreversible land use change. The estimated 535 acres (219 hectares) of cultivated pineapple land is approximately 0.005 percent of the total USDA designated agricultural land on O'ahu and 5 percent of the total area in pineapple production on O'ahu (Statistics of Hawai'i Agriculture 2003). In addition, this land is adjacent to existing urban areas and support services, will not result in the indirect conversion of any existing farmland or farm support services (i.e. irrigation systems) off-site, and will not jeopardize the farm support services on remaining areas. The acquisition area would serve as an additional buffer to the existing training lands, including the range ordnance impact area. Disturbed areas (agricultural fields and roads) would continue to be used for walking and driving between locations. The ITAM program will be used to identify and mitigate potential impacts on the land.

The proposed training land use of agricultural grazing land at the WPAA is not consistent with the County of Hawai'i General Plan (County of Hawai'i 1989) and the County of Hawai'i Zoning Code (County of Hawai'i 2001b). The WPAA is leased by the military approximately four to five times per year for maneuver training, per agreement with the landowner. A change in ownership of the area from private to military is likely to result in an increase in military training use to 40 to 60 times per year. General military training within these areas is not expected to affect off-post land use because these actions will be confined to within the training area boundaries. The Army is considering establishing cooperative relationships with the landowners and lessees to allow continued agricultural use at the SRAA and continued grazing activities at the WPAA, in conjunction with training on the land, subject to constraints posed by training activities. This results in a less than significant impact for WPAA.

Helemanō Trail and Dillingham Trail would be constructed along agricultural roads or undeveloped land. Trail construction and use is not expected to significantly affect land use. Therefore, impacts from conversion of agricultural land to training land for the construction and use of military vehicle trails is a less than significant impact.

PTA Trail construction would require approximately 132 acres (53 hectares) of land easements. The trail alignment is generally along undeveloped property boundaries, existing roads, and existing utility easements. Hence, use of the trail is not expected to significantly affect land use. Therefore, impacts from conversion of agricultural land to training land for the construction and use of military vehicle trails is a less than significant impact.

Construction of FTI in a Conservation District. Of the 25 new antennas proposed under the Proposed Action, five would be constructed within the Conservation District: three on SBMR, one on DMR, and one on PTA. New antenna facilities would reuse existing sites, where possible, and when these are not available, the new antennas would be constructed on relatively small areas (500 square feet [44 square meters]). New facilities would be located, where possible, close to existing access roads or trails. Both existing and new antenna locations would be sited, painted, and landscaped to minimize their impacts on surrounding areas and users. As required in a Conservation District, endemic or indigenous plants will be used to renaturalize project areas where natural vegetation plant cover has been disturbed. Construction would be scheduled, where possible, to minimize conflicts with recreation activities. In addition, the antenna sites would be available for emergency efforts for aiding or rescuing stranded or lost hikers and hunters.

Impacts on land use during construction activities. During construction activities, land uses (including hunting) may be temporarily affected. This impact is less than significant because it would be localized and temporary. Impacts associated with construction of PTA Trail would be greater due to the presence of UXO along the alignment. Prior to construction, UXO cleanup would involve identifying the most probable munitions (MPM), a safety radius associated with UXO. Owners and occupants of the areas within the MPM would be notified, and, as needed, road closures and coordination with local law enforcement agencies, fire departments and transportation agencies would occur. In addition, structures within the MPM may be temporarily evacuated (Streck 2003).

Training changes on lands currently used for Legacy Force training. Most of the land area within the installations that would be used for training under the Proposed Action is being used for Legacy Force training. Land uses would not significantly change with the Proposed Action. Areas being used for maneuver training would continue to be used in the same manner. Vehicles used during maneuver exercises would be replaced by the Stryker vehicle. The land is expected to be used more frequently and intensively. However, maneuver areas would remain the same; therefore, introducing the Stryker is not considered a land use change.

Beneficial Impacts

Impacts on natural resources management and recreational land use. There would be a beneficial impact to recreational land use at WPAA. Hunting activities associated with PTA would not change because the Army would continue its cooperative efforts with the state to provide

access to hunting areas. The WPAA consists of Parker Ranch-managed land, which has hunting restrictions. Acquisition of this land by the Army would have a beneficial impact because the Army would manage it as a hunting area that is open to the public when not in use by the military for training.

Reduced Land Acquisition Alternative

Impacts from construction and land transaction projects would be the same as the Proposed Action, except that QTR2 would be constructed at PTA on the island of Hawai'i instead of on the SRAA.

Less Than Significant Impacts

Conversion of agricultural land to training land. Agricultural land would be changed to training land at the SRAA and the WPAA, and on the easements for Helemanō Trail, Dillingham Trail, and PTA Trail. The proposed training land use would conflict with the existing and planned agricultural land use for 100 acres (40 hectares) at the SRAA and approximately 23,000 acres (9,308 hectares) of grazing land at the WPAA. Impacts from acquisition of the WPAA and easements for the trails would be the same as the Proposed Action.

The proposed acquisition would convert approximately 98 acres (39 hectares) of actively cultivated pineapple land to training land. Under the RLA Alternative, the entire 100 acres would be used for construction and use of a motor pool; none of the area would be available for continued agriculture, and conversion of the land would be a permanent and irreversible land use change. The ITAM program would be used to identify and mitigate potential impacts on the land. The estimated 98 acres (39 hectares) of cultivated pineapple land is 0.001 percent of the total USDA designated agricultural land on O'ahu and is 0.9 percent of the total area in pineapple production on O'ahu (Statistics of Hawai'i Agriculture 2003). As with the Proposed Action, this land is adjacent to existing urban areas and support services, will not result in the indirect conversion of any existing farmland or farm support services off-site, and will not jeopardize the farm support services on remaining areas. Therefore, the impact of this conversion to overall land use is less than significant.

Potential mitigation measures for this impact include establishing a cooperative relationship with the landowner to allow continued grazing activities in conjunction with training on the land at the WPAA, subject to constraints posed by training activities.

Construction of FTI in a Conservation District. Of the 25 new antennas proposed under the Reduced Land Acquisition, five of the antennas would be constructed within the Conservation District. The impacts from construction of these antennas would be the same as the Proposed Action.

Land use during construction activities. Impacts on land use during construction activities would be the same as for the Proposed Action, with the addition of construction of QTR2 on an existing training range area.

Training changes on lands currently used for Legacy Force training. These impacts associated with the RLA Alternative are the same as those described for the Proposed Action.

Beneficial Impacts

Impacts on natural resources management and recreational land use. Under the Reduced Land Acquisition Alternative, access to TNC's natural resources management area and recreation resources on O'ahu would not change from the current conditions. Hunting activities associated with PTA would not change, as the Army would continue its cooperative efforts with the state to provide access to hunting areas. The WPAA consists of Parker Ranch-managed land, which has hunting restrictions. Acquisition of this land by the Army would have a beneficial impact, because the Army would manage it as a hunting area that is open to the public when not in use by the military for training.

No Action Alternative

Under No Action, transformation would not occur, so no major changes to training areas would take place in Hawai'i. The Army would continue to operate and maintain its range, training areas, and support facilities in order to meet its Legacy Force training mission requirement. However, the level of training would change occasionally in response to this requirement and, as a result, the land uses of these areas may change. If future changes could affect the environment, NEPA documentation would be prepared.